

# Regulatory Framework for the Homologation of Telecommunication equipment and apparatus in Paraguay

National Telecommunications Commission  
(CONATEL)



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# PARAGUAY

**Size:** 406.752 Km<sup>2</sup>.

**Population:** 5.163.168 (according to 2002 Census).

**Growth:** 4% in 2004.

**GDP:** 6.260.000 US\$ in 2004.



# CONATEL



**The National Telecommunications Commission (CONATEL) is the regulatory agency of the Government in the telecommunication sector.**

**CONATEL is depended of the Presidency of the Republic through the Ministry of Public Works and Communications.**

**The maximal authority of CONATEL is a board of Directors composed of 5 members, and one of them is the President of the Commission.**

## **CONATEL'S MISSION**

***The National Telecommunications Commission implements the functions of the Paraguayan State of promotion, control and regulation of the telecommunications in the framework of a integrated policy of services, providers, users, technology and industry. (Law 642/95 of Telecommunications).***

# MANAGEMENT STRATEGY



- To protect the interest of the State (efficient use of the radio electrical spectrum, to insure the incomes that belong to the State, etc.).
- To protect the interest of the telecommunication services providers, promoting the investment and the creation of job's places.
- To protect the users in relation with the telecommunication services that are offered by the operators in a framework of free and faithful competency.

# Juridical Framework



- *National Constitution of 1992.*
- *Law N° 642 of Telecommunications; promulgated on December 29th of 1995.*
- *Decree N° 14.135/96, general regulations of the Law 642/95.*
- Regulations generated by CONATEL

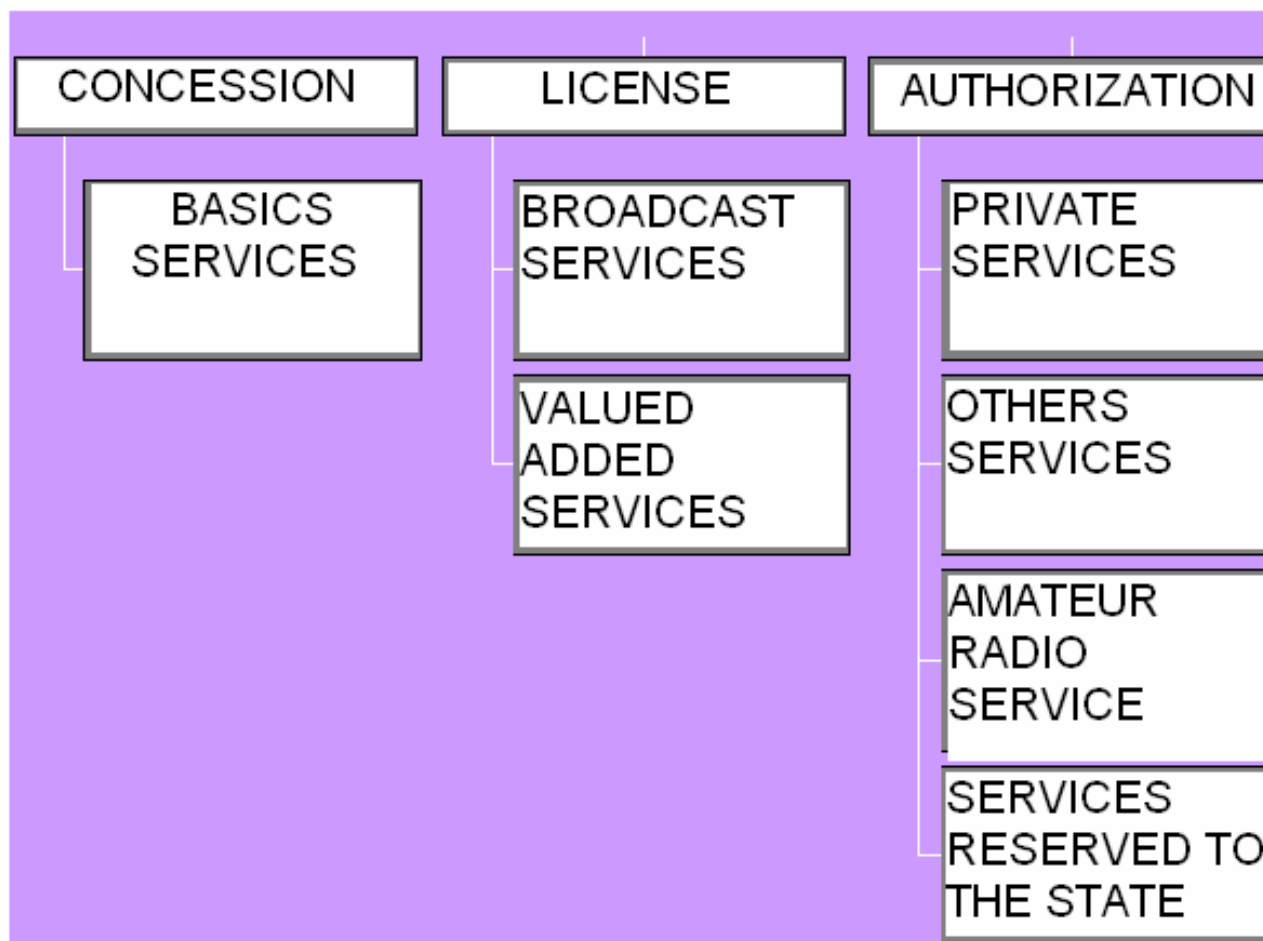
# CONATEL

## Fundamental objectives



- **Ordering of National Regulations in Telecommunications**
- **Ordering the use of the radio electrical spectrum**
- **Regime of subscribers and users protection**
- **Regime of free competency and equality of opportunities**
- **Regime of quality of service of the telecommunications services**
- **Actions needed to fortify the institution and to promote an information and knowledge society in Paraguay.**

# Services and the title needed to provide them



# Providers Situation



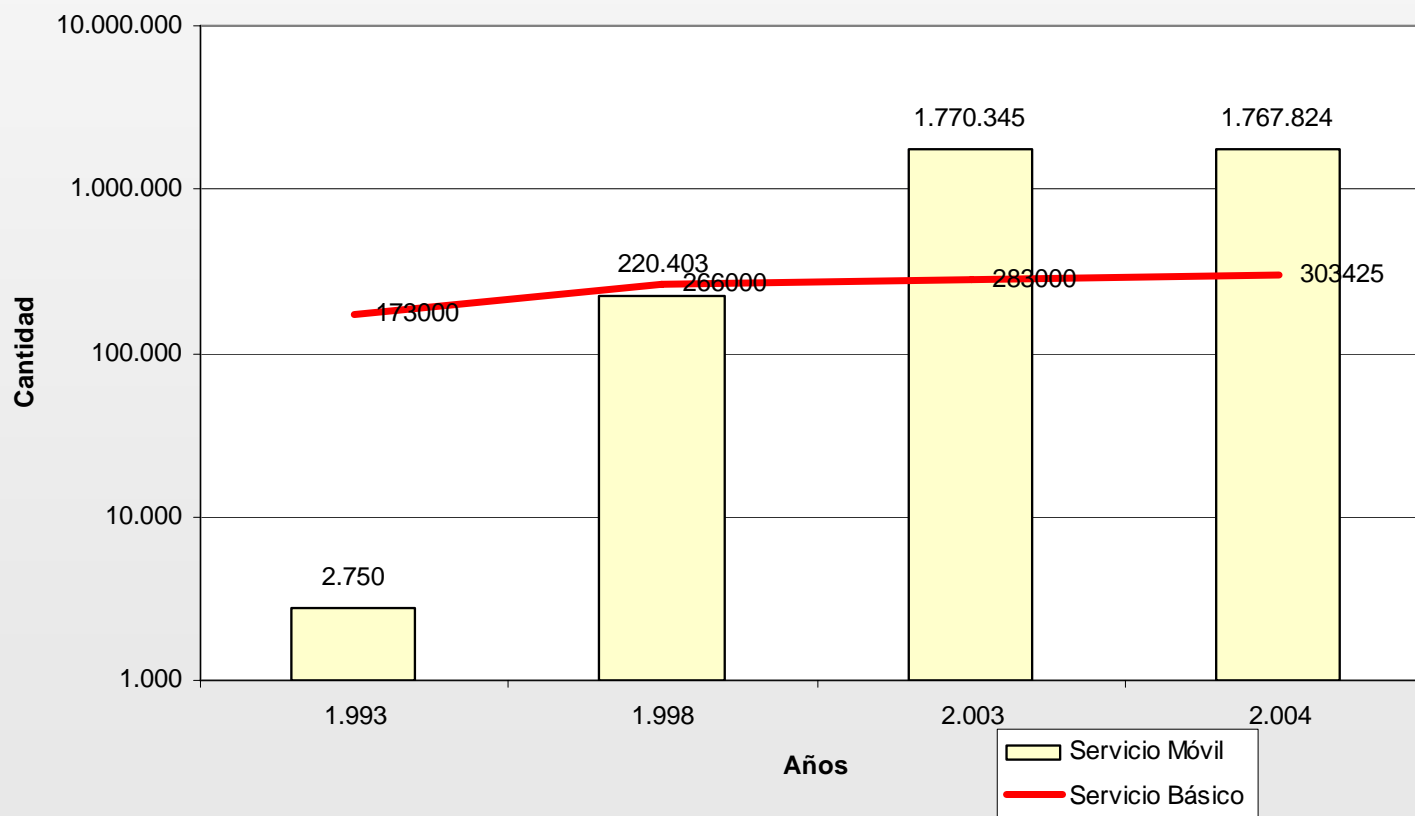
SERVICES	Title	QUANTITY
AUDIOTEXT	License	13
VOICE MAIL	License	1
CABLE OPERATORS	License	121
FIXED TELEPHONY	Concession	1
MOBIL TELEPHONY	License	9
DATA TRANSMISSION	License / Authorization	12
INTERNET ACCESS	License	46
PRE-PAID TELEPHONY	License	7
PUBLIC TELEPHONE SERVICE	License	5.200
BRADCAST RADIO FM	License	192
BROADCAST RADIO AM	License	72
BROADCAST TELEVISION	License	4
WIRELESS CABLE OPERATOR	License	5
TRUNKING	License	9
PAGING	License	10
ALARM BY RADIOELECTRICAL LINK	License	1
RURAL PUBLIC TELEPHONE	License	3 - (1.564 terminals)
INTERNET IN EDUCATIONAL INSTITUTIONS	License	2 - (287 institutions)



# Fixed and Mobile Telephony



Variación de Abonados/usuarios





# SATELLITAL OPERATORS



Operator	Satellite	Bands of Frequency
Nahuelsat	NAHUEL 1	Ku
SATMEX	Solidaridad 2, SATMEX 5, SATMEX 6	C, Ku
PanAmSat	PAS-1R, PAS-3R, PAS-6B, PAS-9, Galaxy IIIC, Galaxy VIII-i, Galaxy XI	C, Ku; extended Ku
New Skies Satellites	NSS-7, NSS-806	C, Ku
TELESAT Canada	Anik F1	C, Ku
Intelsat	IS-707, IS-901, IS-603, IS-905, IS-605, IS-511, IS-801, IS-903, IS-705, IS-706, IS-805, IS-907	C, Ku
LORAL SPACECOM	Telstar 12, Telstar 8, Estrela do Sul 1	C, Ku
Star One	BRASILSAT B-1, BRASILSAT B-2, BRASILSAT B-3, BRASILSAT B-4	C
HISPASAT	HISPASAT-1C, HISPASAT-1D	Ku



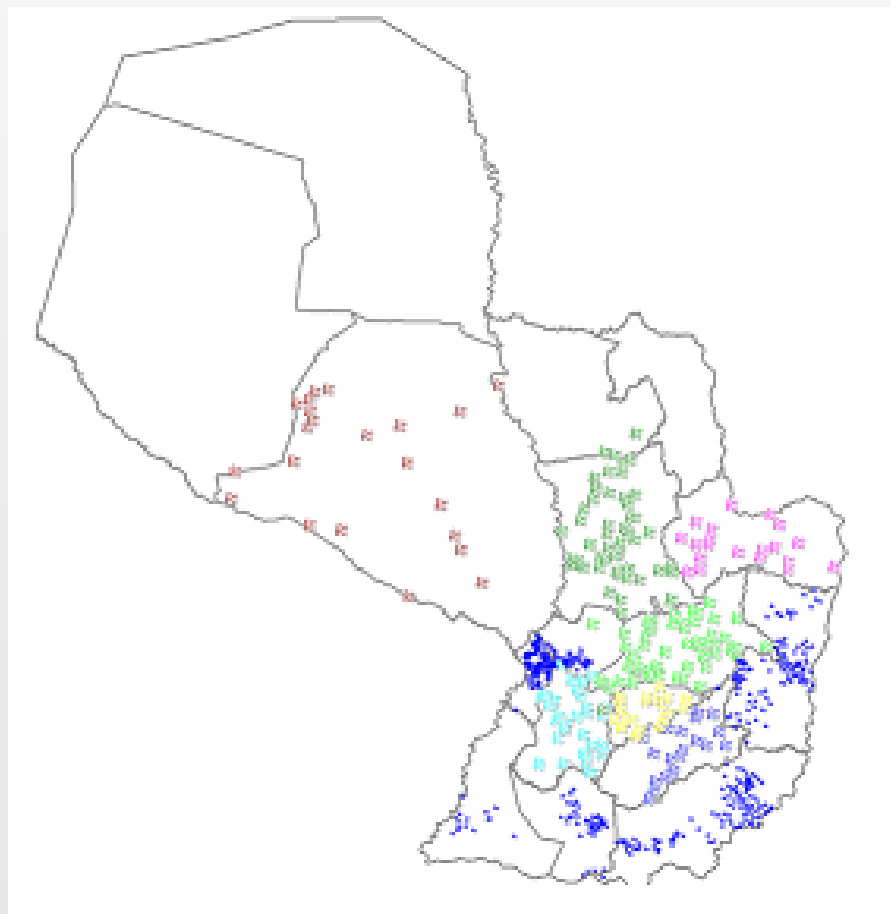
# Providers situation

For more information it is possible to consult the CONATEL's web site

[www.conatel.gov.py/LICENCIATARIOS.htm](http://www.conatel.gov.py/LICENCIATARIOS.htm)

# UNIVERSAL SERVICES FUND

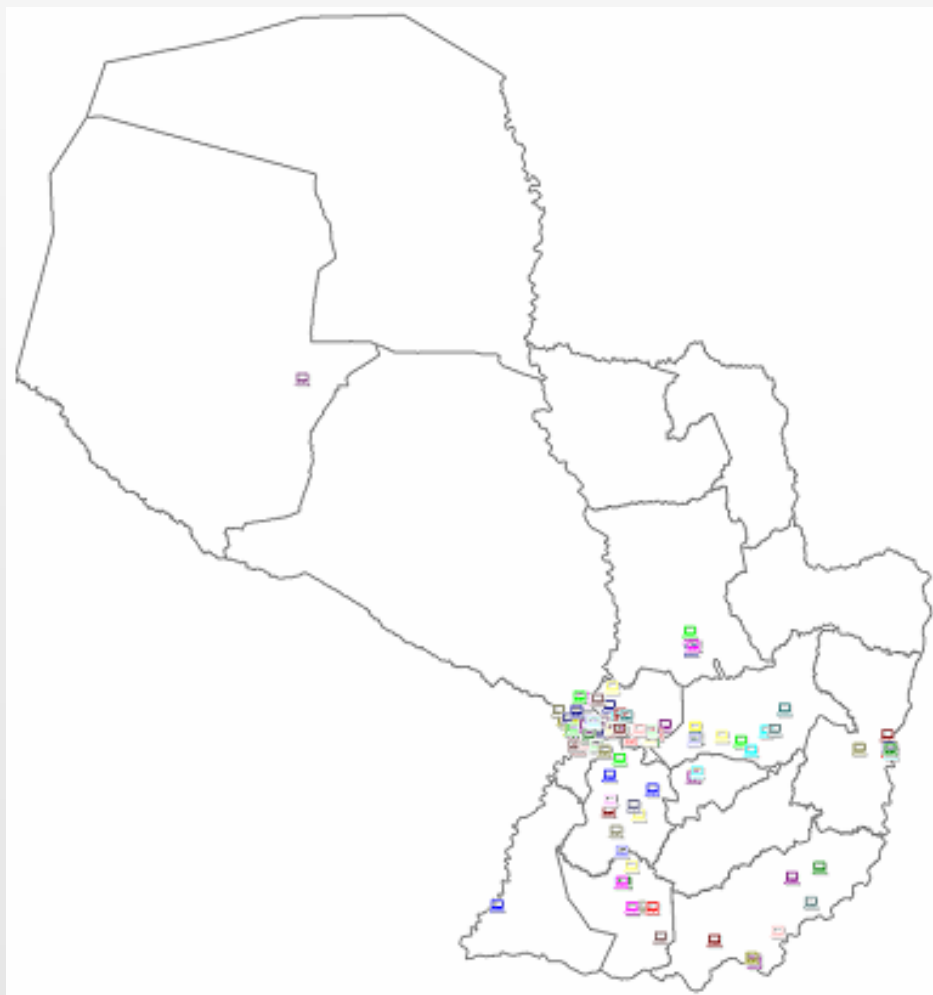
## Rural Telephony with Vsat and Cellular technologies



AMAMBAY	8
CONCEPCION	78
ITAPUA	180
ALTO PARANA	161
CENTRAL	282
CORDILLERA	57
MISIONES	55
ÑEEMBUCU	15
CAAGUAZU	216
CAAZAPA	44
CANINDEYU	44
GUAIRA	56
PARAGUARI	110
PTE. HAYES	49
SAN PEDRO	209
<b>CANT.GENERAL</b>	<b>1564</b>

# UNIVERSAL SERVICES FUND

## INTERNET IN SCHOOLS



ESCUELAS BENEFICIADAS POR DPTO.	
AMAMBAY	2
ALTO PARANA	9
CAAGUAZU	13
CAPITAL	88
CENTRAL	102
BOQUERON	2
PTE. HAYES	2
CORDILLERA	17
GUAIRA	3
ITAPUA	14
MISIONES	12
ÑEEMBUCU	4
PARAGUARI	13
SAN PEDRO	6
TOTAL	287

# UNIVERSAL SERVICES FUND

## Implementation of Telecenters for the development of non formal education at distance



GOBERNACIONES		
1	CONCEPCION	CONCEPCION
2	SAN PEDRO	SAN ESTANISLAO
3	CORDILLERA	CAACUPE
4	GUAIRA	VILLARRICA
5	CAAGUAZU	CNEL. OVIEDO
6	CAAZAPA	CAAZAPA
7	ITAPUA	ENCARNACION
8	MISIONES	SAN JUAN BTA.
9	PARAGUARI	PARAGUARI
10	ALTO PARANA	CIUDAD DEL ESTE
11	CENTRAL	AREGUA
12	NEEMBUCU	PILAR
13	AMAMBAY	PEDRO JUAN CABALLERO
14	CANINDEYU	SALTO DEL GUAIRA
15	PTE. HAYES	VILLA HAYES
16	BOQUERON	FILADELFIA

# UNIVERSAL SERVICES FUND SUPPORT TO THE PUBLIC SECURITY “911 SYSTEM” - ASUNCIÓN



Supply to the National Police a system for the attention and dispatch of emergency calls.



# Homologation



In recent years, extraordinary advances in telecommunications have been made worldwide and, consequently, in all areas related to it, such as telecommunication equipment, network infrastructure, and services.

In Paraguay, development of the regulatory framework for the homologation of telecommunication equipment and apparatus has been somewhat slow, at least compared to progress made worldwide in this area.

Testing and determination of compatibility of the functioning and operation of a piece of telecommunication equipment with a telecommunication network or system in accordance with the established technical provisions is increasingly necessary, as telecommunications is inevitably present in countless facets and aspects of our lives.

In the Republic of Paraguay, the National Telecommunication Commission (CONATEL), in the exercise of its authorities (**Article 131 of Decree 14.135 of July 15, 1996, regulating the Telecommunications Act, Law N° 642/95**), adopted in Resolution R.D. N° 355/1999 of August 20, 1999, provisional Regulations establishing the procedure for the homologation of telecommunication equipment and apparatus.

The Regulations on the Homologation of Telecommunication Equipment and apparatus (RPHEAT) were adopted provisionally owing to the lack of an effective structure and operation of the National Accreditation Agency (**ONA, established in Decree 20660 of April 20, 1998**).



AMONG CONATEL'S FUNCTIONS ARE:  
(TELECOMMUNICATIONS ACT, LAW 642/95)



- **Article 16.** The National Telecommunication Commission will have the following functions:
- .....
- n.) Homologation [approval] of telecommunication equipment and systems installed in Paraguay;

# STANDARDIZATION AND HOMOLOGATION OF TELECOMMUNICATION EQUIPMENT AND APPARATUS (LAW 642/95)



**Article 74.** Telecommunication equipment and installations are subject to the homologation, inspection, and control established by the National Telecommunication Commission to ensure the integrity of the telecommunication network and radio spectrum, and user safety.

Holders of concessions, authorizations, or licenses, and the users thereof, have an obligation to facilitate this function in the manner and conditions established by the National Telecommunication Commission.

# STANDARDIZATION AND HOMOLOGATION OF TELECOMMUNICATION EQUIPMENT AND APPARATUS (LAW 642/95)



**Article 75.** Homologation shall be required for total or partial connection of telecommunication equipment or apparatus, with such exceptions as the National Telecommunication Commission may establish ...

# STANDARDIZATION AND HOMOLOGATION OF TELECOMMUNICATION EQUIPMENT AND APPARATUS (LAW 642/95)



**Article 76.** The marketing and operation of telecommunication equipment and apparatus that have not been approved, do not comply with the provisions of this Act or the regulations thereto, or have been mechanically or electronically altered since their approval is prohibited, except in the cases expressly established in the Act and the corresponding regulations.

# GENERAL REGULATIONS TO THE TELECOMMUNICATIONS ACT (ANNEX TO DECREE N° 14.135/96)



**Article 1.** These Regulations establish general provisions for the delivery of telecommunication services, the organizational structure of the National Telecommunication Commission, administration of the radio spectrum, **standardization and homologation of telecommunication equipment and apparatus**, and regulations for the marketing of services, so that these may be carried out in pursuance of the objectives and principles established in the Telecommunications Act.

GENERAL REGULATIONS TO THE  
TELECOMMUNICATIONS ACT  
(ANNEX TO DECREE N° 14.135/96)



**Article 130.** The objective of homologation of telecommunication equipment and apparatus is to ensure adequate compliance with the technical specifications to which they shall be subject to prevent damage to the networks to which they are connected, prevent interference of other telecommunication services, and ensure the provision of good service to users, within the quality and efficiency parameters.

# GENERAL REGULATIONS TO THE TELECOMMUNICATIONS ACT (ANNEX TO DECREE N° 14.135/96)



**Article 131.** All telecommunication equipment and apparatus connected to the public network or used for radiobroadcasting or reception must be approved before they are marketed, used, and/or operated in the Paraguayan market. To that end, the applicant shall comply with such requirements as the National Telecommunication Commission may establish in its specific regulations.

Telecommunication service providers shall notify the National Telecommunication Commission of the list of equipment, with its technical characteristics, that may be connected to its network. Such information must be updated periodically.

GENERAL REGULATIONS TO THE  
TELECOMMUNICATIONS ACT  
(ANNEX TO DECREE N° 14.135/96)



**Article 132.** Equipment utilizing the radio spectrum and transmitting at 10 mW or above by antenna (effective irradiated power) shall be approved prior to their marketing.



GENERAL REGULATIONS TO THE  
TELECOMMUNICATIONS ACT  
(ANNEX TO DECREE N° 14.135/96)



**Article 133.** The National Telecommunication Commission may assign to third parties responsibility for conducting the tests necessary for the homologation of equipment or apparatus of each specialty, in accordance with the technical specifications. Companies with responsibility for such tests shall be known as “verification companies.”

# GENERAL REGULATIONS TO THE TELECOMMUNICATIONS ACT (ANNEX TO DECREE N° 14.135/96)



**Article 134.** The same provisions of Article 119 of these Regulations shall apply to “verification companies.”

- Article 119. The National Telecommunication Commission shall issue specific regulations on “inspection companies,” which shall establish the mechanisms and requirements for the designation thereof, their rights and obligations, granting of guarantees of discharge of their obligations, infractions, and sanctions, general operating guidelines, and such other aspects as are deemed pertinent.

GENERAL REGULATIONS TO THE  
TELECOMMUNICATIONS ACT  
(ANNEX TO DECREE N° 14.135/96)



**Article 135.** The National Telecommunication Commission shall issue a homologation certificate attesting that the approved equipment or device complies with the technical specifications established based on the regulations.

GENERAL REGULATIONS TO THE  
TELECOMMUNICATIONS ACT  
(ANNEX TO DECREE N° 14.135/96)



**Article 136.** Telecommunication service operators shall be obliged to connect to their networks or systems the terminal equipment that users acquire or lease to third parties, provided that it is compatible and has been duly approved. Therefore, they may not oblige users to acquire their equipment or other goods or services as conditions for providing them with the requested service.

# HOMOLOGATION

## Article 2 (RPHEAT)



Homologation is control, rather than administration, imposed by a country on manufacturers and importers. Its rationale is the common good of the society governed; protection of health and human life, environmental protection, energy conservation, etc. Within the scope of this document, it is the procedure used by CONATEL to authorize the importation, manufacture, or sale, for use within Paraguayan territory, of telecommunication equipment based on certificates in which a third party gives a written assurance that a product, process, or service meets the established requirements, possibly followed by tests of units of the approved product, whether on the market or in the factory itself, to determine whether in its ongoing manufacture there is continued conformity to the aforementioned requirements.



## CERTIFICATE OF HOMOLOGATION

### Article 6 (RPHEAT)

A CONATEL resolution certifying that telecommunication equipment and apparatus meet the applicable national and/or international requirements. It is issued in the form established in the provisions of the Provisional Regulations on the Homologation of Telecommunication Equipment and apparatus.

# CERTIFICATE OF CONFORMITY

## ARTICLE 12 (RPHEAT)



A document issued in accordance with the regulations of a certification system, indicating that adequate assurance has been given that a duly identified product, process, or service conforms to a particular standard or other regulatory document.



## TECHNICAL TESTING REPORT

### ARTICLE 12 (RPHEAT)

A document issued by institutions accredited or accepted by CONATEL demonstrating that a product, process, or service complies with the applicable technical specifications or standards.





## DECLARATION OF TYPE CONFORMITY

### ARTICLE 14 (RPHEAT)

A document in which the manufacturer or its agent gives an assurance and states that the products in question are in conformity with the type described in the technical performance testing document (certificate of conformity and technical testing report) and comply with the applicable provisions of the Provisional Regulations on the Homologation of Telecommunication Equipment and apparatus.

# ACCREDITATION BODY



## Established in Executive Decree N° 20660/98

- Subordinate to the Science and Technology Council (CONACYT)
- Has competence for accreditation of conformity assessment bodies. These are testing and calibration laboratories, bodies conducting inspections, and certification bodies.
- Accreditation: A process establishing and formally recognizing that the specified entities are technically competent to carry out such tasks.

# STRUCTURE OF THE NATIONAL ACCREDITATION AGENCY (ONA)



- **The National Science and Technology Council (CONACYT). Its functions are:**
  - Establishment of national accreditation policy
  - Establishment of accreditation policies and directives
  - Designation of the members of the ONA Permanent Technical Committee (CTP) and the Executive Secretary
  - Critical evaluation of the system

## ESTABLISHMENT OF THE ONA PERMANENT TECHNICAL COMMITTEE

- **The ONA Permanent Technical Committee (CTP)**

The CTP comprises three experts representing the public and three representing the private sector, who are specialists in at least one of the accreditation areas: certification, testing or calibration, and inspection.

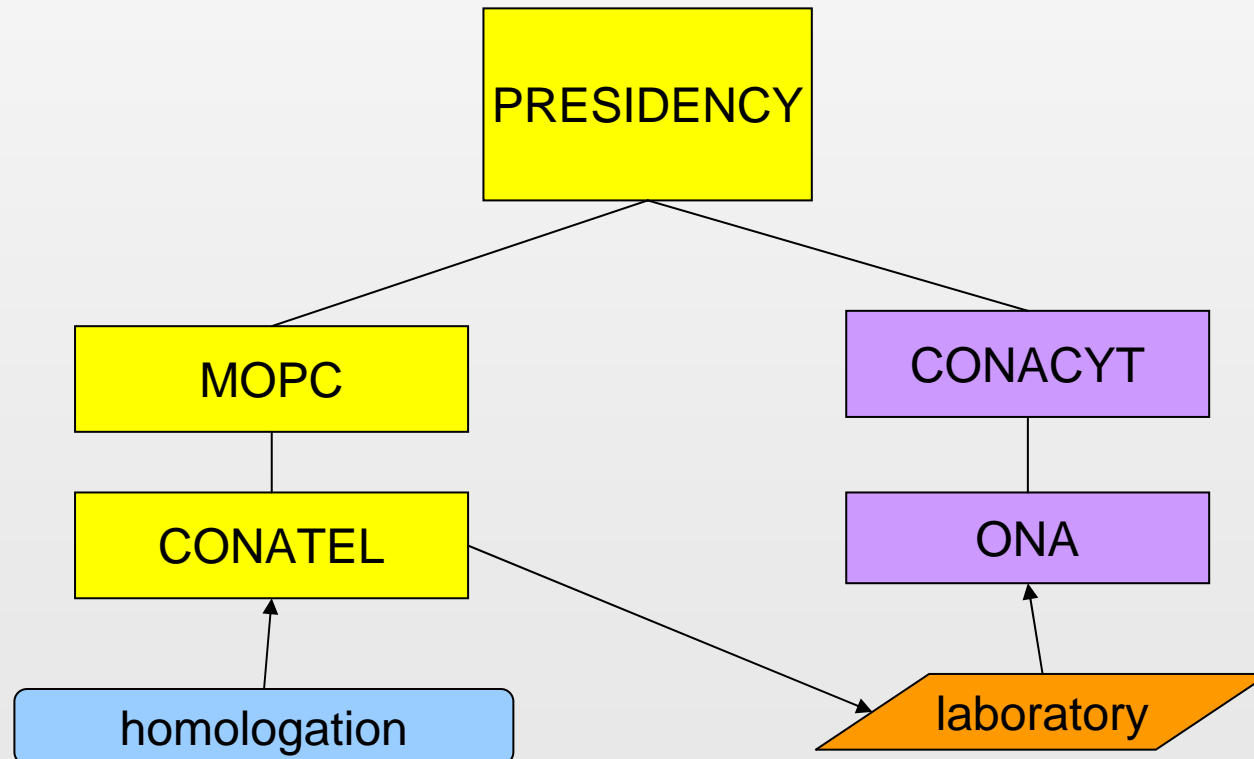
## FUNCTIONS OF THE ONA PERMANENT TECHNICAL COMMITTEE (CTP)

- To establish subcommittees of specialists for each accreditation area;
- To nominate certified and recognized assessors to conduct the corresponding assessments in accordance with the accreditation area;
- To review assessment reports and issue the corresponding technical report on the award, cancellation, renewal, or suspension of the accreditation.

## STATUS OF ACCREDITED LABORATORIES

- Some private laboratories and the National University of Asunción are now taking steps to obtain accreditation to conduct laboratory testing of telecommunication equipment and apparatus.
- We owe it to the general public of Paraguay to establish the accreditation policies and mechanisms for testing laboratories and accreditation bodies in order to ensure and guarantee society the protection of its health, life, environment, etc.

# WHERE IS CONATEL IN THE HOMOLOGATION PROCEDURE?



# MRA



- MERCOSUR: Argentina – Brazil – Paraguay – Uruguay.
- The MRA is under the final analysis and it's expected to be approved in the next Mercosur's meeting.



## WEBSITES OF REFERENCE

- CONATEL: [www.conatel.gov.py](http://www.conatel.gov.py)
- CONACYT: [www.conacyt.org.py](http://www.conacyt.org.py)
- ONA: [www.conacyt.org.py/ona.htm](http://www.conacyt.org.py/ona.htm)
- REGULATIONS ON HOMOLOGATION:

[www.conatel.gov.py/reglamentos%20publicados%20en%20gaceta.htm](http://www.conatel.gov.py/reglamentos%20publicados%20en%20gaceta.htm)

(Item 19)



***THANK YOU VERY MUCH***

*Víctor Martínez*

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